DOCUMENT RESUME

ED 216 088 UD 022 274

TITLE New Utrecht High School Project IMPACT. E.S.E.A. Title VII Final Evaluation Report, 1980-81.
INSTITUTION New York City Board of Education, Brooklyn, N.Y. Office of Educational Evaluation.
SPONS AGENCY Office of Bilingual Education and Minority Languages Affairs (ED), Washington, DC.
PUB DATE [81]
GRANT G008006389
NOTE 43p.; Project No. 5001-56-17641. For a related document, see ED 142 667.

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Academic Achievement; *Bilingual Education; Business Education; Community Involvement; Counseling Services; Curriculum Development; English (Second Language); High Schools; Industrial Arts; *Italian Americans; *Language Proficiency; Mainstreaming; *Mathematics Achievement; Mathematics Curriculum; Native Language Instruction; Program Content; *Program Effectiveness; Science Curriculum; Social Studies; Staff Development
IDENTIFIERS Elementary Secondary Education Act Title VII; *Limited English Speaking; New York City Board of Education

ABSTRACT

This report describes and evaluates Project Impact, a magnet program that provided instruction in English as a Second Language and in Italian language skills, and bilingual instruction in science, mathematics, social studies, industrial arts, and secretarial studies to Italian speaking students of limited English proficiency. The program, as implemented in 1980-81, aimed to develop English language skills to effect a gradual transition into the mainstream within 2 years. Aside from instruction, the program provided for curriculum and materials development, counseling and supportive services, staff development, and parent involvement. Evaluation indicated that some gains were achieved in English reading, English listening comprehension, and Italian reading. However, irregularities in the pattern of gains and in correlations between pretests and posttests suggested that the achievement data in these areas were inconclusive. In mathematics, relatively significant gains were demonstrated. The attendance rate among students in the program was significantly greater than the rate for the entire school. To enhance program effectiveness, it was recommended that evaluation procedures be improved and that communication among schools with Italian bilingual programs be increased. (MJL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED216088

FINAL EVALUATION REPORT

E.S.E.A. Title VII

Grant Number: G0008006389

Project Number: 5001-56-17641

NEW UTRECHT HIGH SCHOOL

PROJECT IMPACT

1980-81

Principal: Mr. Michael Russo

Coordinator: Mr. Joseph Rizzi

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

T. K. Minter
New York City Bd. of Ed.

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

✓ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

Prepared By The

BILINGUAL EDUCATION EVALUATION UNIT

Ruddie A. Irizarry, Manager
Judith A. Torres, Evaluation Specialist
Vincent James Di Martino, Consultant
Frank O'Brien, Ph.D., Consultant

UD 022 274

NEW YORK CITY PUBLIC SCHOOLS
OFFICE OF EDUCATIONAL EVALUATION
RICHARD GUTTENBERG, ADMINISTRATOR

ACKNOWLEDGEMENTS

The production of this report, as of all Bilingual Education Evaluation Unit reports, is the result of a cooperative effort of permanent staff and consultants. Rima Shore and Armando Cotayo have labored over and edited initial drafts, ensuring that they conformed to O.E.E. standards of scope and style. Dennis Joyce has spent many hours creating, correcting, and maintaining data files. Franco Marinai has patiently reviewed, edited, analyzed, and reported project data. Margaret Scorza has managed the production process, frequently editing and reformatting drafts and assuring that the reports are complete and accurate. Joseph Rivera has spent many hours producing, correcting, duplicating, and disseminating reports. Without their able and faithful participation the unit could not have handled such a large volume of work and still produced quality evaluation reports.

A SUMMARY OF THE EVALUATION

FOR PROJECT IMPACT

NEW UTRECHT HIGH SCHOOL

1980-1981

This magnet program, in its first year of funding, provided instruction in E.S.L. and Italian language skills, as well as bilingual instruction in science, mathematics, social studies, industrial arts, and secretarial studies to approximately 160 students of limited English proficiency in grades nine through twelve. Ninety-five percent of the target population were born in Italy and 100 percent spoke Italian at home as their first language. The students varied in educational preparedness, ability in their native language, and proficiency in English.

One of the major goals of the program was to expedite the acquisition of the English language skills necessary for full mainstreaming within an average span of two years. A gradual transition into the mainstream was accomplished by initially placing a student in one English-only class, usually mathematics, then adding other classes as the student's proficiency in English increased. During this time, each student was fully evaluated on a continuous basis.

Title VII funds supported administrative and support services staff. All instructional services and paraprofessional assistance were provided by tax levy personnel. Curriculum materials were developed in the areas of computer science, secretarial studies, and industrial arts and were in use in bilingual content-area classes. Supportive services to program students consisted of personal and academic guidance, home visits, and vocational counseling. Development activities for staff members included regularly scheduled department meetings and workshops and attendance at conferences on bilingual education. Parents of participating students were involved through a Parent/Student/Community Advisory Committee and attendance at program and school-wide activities.

Students were assessed in English language development (Stanford Achievement Test); growth in their mastery of Italian (teacher-made tests); mathematics (teacher-made tests); and attendance (school and program records). Quantitative analysis of student achievement indicated that:

-- In English reading, ninth-, tenth-, and eleventh-grade students, tested with Level II generally made statistically significant gains below the .05 level and were of moderate to great educational significance. The small number of students, the pattern of score increases, and low or negative correlations, noted especially in grades nine and ten suggest that these outcomes should be interpreted with caution.

The gains made by ninth-, eleventh-, and twelfth-grade students tested on Level III were not statistically significant. The pattern of small or negative gains between pre- and post-test scores at the upper range of the test suggests that Level III was too easy for the population tested.

-- In English listening comprehension, only a small group of tenth-grade students tested with Level II demonstrated significant gains. Irregularities in testing or in scoring and reporting outcomes is suspected for data reported in this area.

-- In Italian reading, ninth, tenth, and eleventh graders demonstrated significant growth; twelfth-grade students did not. The low or negative correlations for ninth- and twelfth-grade results suggest the test was unreliable.

-- In mathematics, ninth and tenth graders demonstrated significant growth in basic mathematical skills. However, the negative pre/post correlations for tenth-grade students suggest low test reliability. Tenth and eleventh graders demonstrated significant growth in geometry achievement at very high levels.

-- The attendance rate of program students was significantly greater than that of the entire student body.

The following recommendations were aimed at improving the overall effectiveness of the program:

-- Giving college credit (through local colleges and universities) for courses taken by Project IMPACT students as an incentive for higher education;

-- Obtaining evaluation data as proposed in the areas of science, social studies, industrial arts, and secretarial studies;

-- Examining the conditions under which tests are administered, improving the procedures by which tests are scored and outcomes reported, and reviewing the adequacy of teacher-made examinations in Italian reading and basic mathematical skills;

-- Refining the record-keeping process for self-evaluation and future program development;

-- Increasing communication with other secondary schools with Italian bilingual programs to share curriculum and materials and reduce the duplication of services.

TABLE OF CONTENTS

		PAGE
I.	Demographic Context	1
II.	Student Characteristics	5
	Entry Criteria	7
III.	Program Description	8
	Philosophy of Program	8
	History of Bilingual Education at New Utrecht	9
	Staffing Patterns	9
IV.	Instructional Offerings	11
	English as a Second Language	11
	Instruction in Native Language Arts	11
	Bilingual Instruction in Content Areas	13
	Transition to Mainstream Classes	13
	Mainstream Classes	15
V.	Non-Instructional Component	17
	Curriculum Development	17
	Program Projections for Future Growth	17
	Supportive Services	19
	Staff Development	20
	Parent Participation	21
	Affective Domain	22
VI.	Findings	23
VII.	Conclusions & Recommendations	32

LIST OF CHARTS AND TABLES

		PAGE
Chart 1.	Project IMPACT organizational chart.	10
Table 1.	Number and percentages of students by sex and grade.	5
Table 2.	Number of students by age and grade.	6
Table 3.	E.S.L. offerings: courses and laboratories.	11
Table 4.	Instruction in native language arts.	12
Table 5.	Bilingual instruction in content areas.	14
Table 6.	Mainstream classes in which program students are enrolled.	16
Table 7.	Projected offerings and program enrollment.	18
Table 8.	English reading achievement.	26
Table 9.	English listening comprehension.	27
Table 10.	Italian reading achievement.	28
Table 11.	Mathematics (basic competency) achievement.	29
Table 12.	Mathematics (geometry) achievement.	30
Table 13.	Attendance	31

PROJECT IMPACT

NEW UTRECHT HIGH SCHOOL

Location:	1601 80th Street, Brooklyn, New York 11214
Year of Operation:	1980-1981, first of three years of funding
Target Language:	Italian
Number of Participants:	160 students
Principal:	Michael Russo
Coordinator:	Joseph Rizzi

I. DEMOGRAPHIC CONTEXT

New Utrecht High School is located in the Bensonhurst section of Brooklyn. It serves the Bensonhurst, Boro Park, Dyker Heights, and Bay Ridge sections of the borough. Bensonhurst has the greatest concentration of Italo-Americans in the United States. This is easily observed by the number of Italian specialty shops in the area and the frequency in which one hears Italian and its numerous dialects spoken in the vicinity of the school. Bay Ridge and Dyker Heights have many one-family homes of second and third generation Italo-Americans, many of whom are professionals. The Boro Park section has also a strong orthodox Jewish community. The parents of these families, for the most part, send their children to religious schools.

The neighborhood immediately surrounding the school is predominately working class residential with well-kept two- or three-family homes, small

apartment houses and some one-family homes. There are also numerous small stores and factories particularly along New Utrecht Avenue. The school is centrally located in Brooklyn and is very well served by public transportation. The BMT subway is one half block from the school. There are also several bus lines which are within a short walking distance.

The school building and grounds occupy one full city block with track and athletic fields on New Utrecht Avenue. The school was built in 1925 and is well equipped with two full-sized gyms, a swimming pool, shops, music and art rooms, science and computer labs, etc., in keeping with a large city comprehensive high school (grades 9 - 12). The building has its fair share of graffiti, and teachers have complained that some parts of the school have not been painted in over twenty years. Some classrooms still have the original stationary desks with ink-wells and over a half-century's worth of student carvings. Yet, overall the general appearance of the school is acceptable.

The bilingual program shares an office with the foreign languages department. The bilingual resource center is adjacent to the foreign languages office and serves as a home base for the bilingual staff and students. The resource center is well stocked with books, magazines, reference books, curriculum guides, audio-visuals, etc. and is heavily utilized. Individual and group instruction, counseling, parent interviews, and club meetings were all observed during site visits. The bilingual program has developed and continues to develop an outstanding collection of Italian books in the Italian section of the school library which not only serves the school population but also the Italian-speak-

ing community at large. In addition, the program has installed this year a full computer laboratory for the exclusive use of the bilingual program students and offers computer science as part of the curriculum.

The community also offers a variety of resources through its many civic organizations: Catholic Charities, CIAO, AMICO, and Italian Board of Guardians. These organizations are utilized fully by the family assistants of the program.

The High School Language Survey taken during the school year 1979-1980 by the Office of Bilingual Education for the borough of Brooklyn shows that 17 of the 37 high schools (46 percent) in Brooklyn, have a total of 1,041 Italian-dominant students in need of bilingual education (or some special service for students of limited English proficiency [LEP]). IMPACT has been chosen to meet the needs of these LEP students by functioning as a magnet program for the borough of Brooklyn. New Utrecht High School has been selected as the site for this magnet program because: it has had a successful history of Italian bilingual education; it is centrally located in the largest Italian-American community in the nation; and it is easily reached by mass transportation.

In District 20 as a whole, 49 percent of the intermediate and high school population is of Italian heritage. Fifty-seven percent of the feeder school population in the district is eligible for "Free A Lunch" or "Reduced A Lunch."

According to the Annual School Census, October 1980, New Utrecht High School's student body is composed of 15 percent black, seven percent Hispanic, one percent Asian, and 77 percent white students. Sixty-five percent of the school population is made up of Italian immigrants

or students of Italian heritage. Approximately five hundred of these students are limited English proficient. While 16 percent of New Utrecht's school body qualified as free lunch eligibles in 1977 (according to School Profiles, 1977,) only 13 percent were deemed eligible in 1980.

II. STUDENT CHARACTERISTICS

Ninety-five percent of the program students were born in Italy and 100 percent of the students speak Italian at home as their first language. Most of the students have had their primary and some of their secondary education in Italy.

Because there may be selective personal and environmental pressures on students in urban communities, the composition of the student body may vary from school to school and grade to grade within a school. Table 1 presents the distribution by sex and grade of bilingual program students for whom information was provided.

Table 1. Number and percentages of students by sex and grade. (N=118)

GRADE	MALE N	PERCENT OF GRADE	FEMALE N	PERCENT OF GRADE	TOTAL N	PERCENT OF ALL STUDENTS
9	16	40%	24	60%	40	34%
10	12	40%	18	60%	30	25%
11	10	28%	26	72%	36	31%
12	3	25%	9	75%	12	10%
TOTAL	41	35%	77	65%	118	100%

- The percentage of program students is highest in the ninth grade and lowest in the twelfth grade.
- In all grades, the percentages of female students are higher than the percentages of male students.

Because so many of the bilingual program students are immigrants, their educational histories may vary considerably. Many have suffered interrupted schooling, or have received fewer years of education than their grade level would indicate. Program students are reported by age and grade in Table 2.

Table 2. Number of students by age and grade*. (N=117)

AGE	GRADE 9	GRADE 10	GRADE 11	GRADE 12	TOTAL
14	1				1
15	20	1			21
16	11	17	2		30
17	4	9	16	2	31
18	2	3	16	6	27
19			2	2	4
20				2	2
21				1	1
TOTAL	38	30	36	13	117
PERCENT OVERAGE FOR THEIR GRADE	45%	40%	50%	38%	44%

* Shaded boxes indicate the expected age range for each grade.

- .44 percent of the program students are overage for their grade.
- .The highest percentage of overage students occurs in the eleventh grade.

Students come with a very wide range of abilities in Italian--from minimum competency to highly literate. Their proficiency in English also ranges from no knowledge of English to proficient. Program students have little opportunity to use English outside the school setting with their friends and relatives; Italian is used exclusively. In school, students communicate in English in their mainstream classes and for part of the time, depending on their proficiency, in their bilingual classes.

The evaluator observed that English is used among students when discussing school-related activities, while they use Italian in relating personal experiences. Many of the program students, especially male, hold after-school jobs which often interfere with participation in after-school activities.

ENTRY CRITERIA

Project IMPACT serves the Italian-dominant students who:

1. have recently arrived from Italy;
2. score below the twentieth percentile on the English part of the Language Assessment Battery (LAB);
3. request to be part of the program.

Some of the participating students speak English with sufficient competence to take most of their courses in the mainstream. They participate in the native language arts, guidance, and vocational training components of the program, and are included on the basis of student or parent request. Others who may have difficulties with English in their mainstream classes receive tax levy and Title I/ P.S.E.N. financed individual assistance.

III. PROGRAM DESCRIPTION

IMPACT is a magnet bilingual program for Italian-dominant students presently serving 160 students, grades 9 through 12. During the first year of funding, 90 percent of the program students lived in the attendance area of the school. As of June 1981, 60 new ninth and tenth graders have been recruited through an arduous effort of articulation with other secondary schools, not only in the attendance area, but borough-wide. There is a good possibility that this number will increase by the time recruitment is completed in September. For the 1981-1982 school year, the out-of-district enrollment will make up about half of the number of students in the program.

IMPACT offers full academic and career programs in grades 9 through 12. Programming is uniform at each level with provisions made for extracurricular activities. Students are placed in programs based on content-area needs and not by grade level. Placement in English as a second language is determined by proficiency in English.

PHILOSOPHY OF THE PROGRAM

The philosophy of bilingual education is very clearly transitional. According to the principal, "If students are to survive in American society they must function in English; (we) will not perpetuate a ghetto mentally." This statement is said to reflect the feelings of the entire staff of the bilingual program. The principal went on to say that this did not mean that one should not have pride in one's own culture and heritage.

HISTORY OF BILINGUAL EDUCATION AT NEW UTRECHT

Although this is the first year of funding of IMPACT, New Utrecht High School had pioneered bilingual education for Italian-dominant students at the secondary level with the Title VII CAPISCO Program which served as a model for other secondary schools with Italian-speaking populations. It is timely, therefore, that IMPACT is now reaching out-of-district and serving a wider range of students borough-wide as a magnet school and is offering a variety of vocational courses, in addition to the basic program of bilingual education.

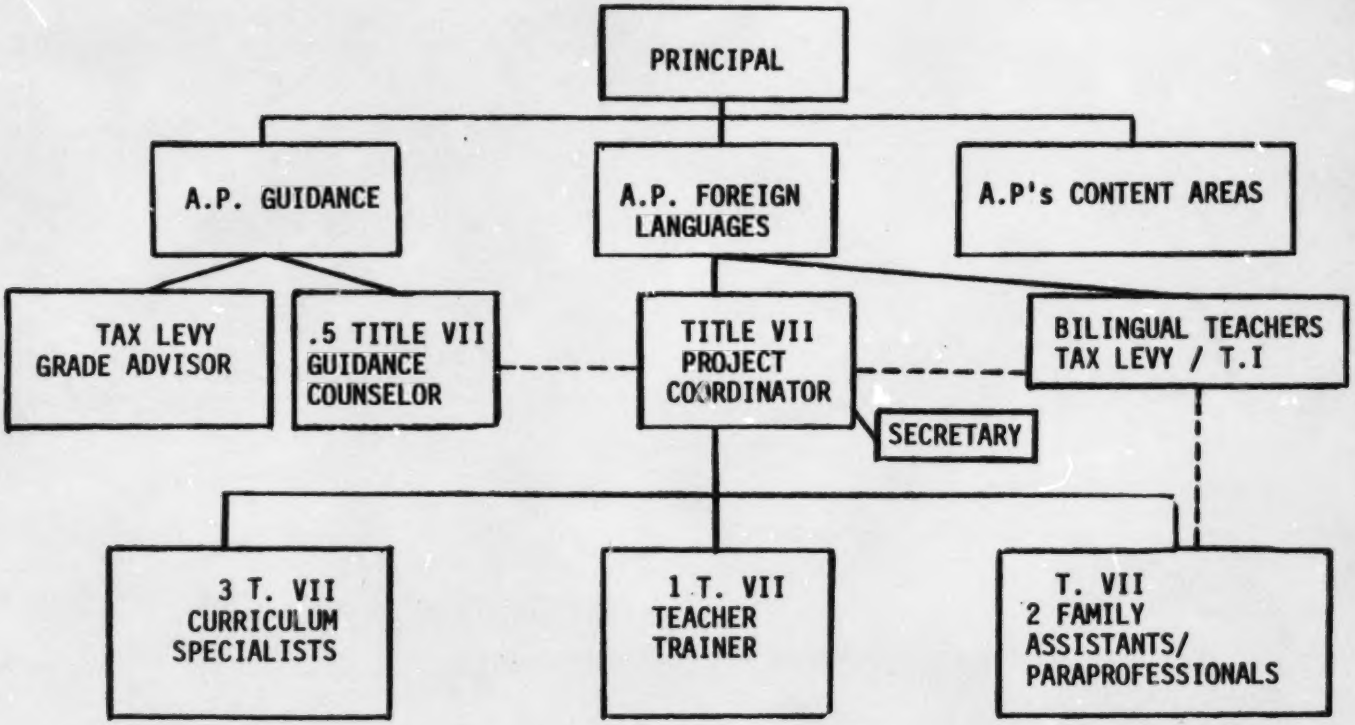
STAFFING PATTERNS

Title VII funds finance one projector coordinator, three curriculum specialists, one teacher counselor, one teacher trainer, one secretary, and two family assistants. All personnel in IMPACT are fully bilingual and certified in their fields.

Tax levy funds finance all bilingual content-area and E.S.L. classroom teachers. The program tries to place competent and certified bilingual teachers in each department. If English-dominant bilingual teachers are used, Italian-dominant paraprofessionals are utilized to compensate for lack of full proficiency in Italian.

The project coordinator is in charge of the bilingual program operations. He is supervised by the assistant principal for foreign languages. Chart 1 illustrates how the bilingual program at New Utrecht is arranged organizationally.

Chart 1. Project IMPACT organizational chart.



IV. INSTRUCTIONAL OFFERINGS

ENGLISH AS A SECOND LANGUAGE (E.S.L.)

All students participating in the E.S.L. program receive instruction in English which is scaled according to proficiency. Each class listed in Table 3 meets five class periods per week. The materials in use are those prepared by the Institute for Modern Languages. Fifty-seven of the program students are enrolled in mainstream English classes. Some students continue to get support through the Title I remediation program.

Table 3. E.S.L. offerings: courses and laboratories.

COURSE TITLE/ LEVEL	NUMBER OF CLASSES	AVERAGE CLASS REGISTER	DESCRIPTION
Basic English 1	2	27	Development of listing, speaking, reading and writing skills in English.
Basic English 2	1	26	
Basic English 3	1	23	
Speech Lab. 1	1	21	Development of fluency, acquisition of native-like accent, intonation, and speech patterns.
Speech Lab. 2	1	19	
Remedial mainstream English	1	25	
Mainstream English	1	22	

NATIVE LANGUAGE INSTRUCTION

The main objective of the native language course is to improve native language skills, and enhance pride in one's own culture and heritage. All of the 160 students in the bilingual program are enrolled in

Italian language classes which meet five periods per week.

LEP students who are weaker in Italian language skills because of low educational level or heavy dialectical influences are placed in the regular Italian foreign language program levels I through IV. Students who have well developed skills in Italian are placed in the native language or travel and tourism classes. It should be noted that although the travel and tourism course can be considered content area, one of its main objectives is to develop proficiency in commercial Italian.

Placement into the various levels of native language arts is determined by teacher-prepared tests, student interviews, and analysis of short compositions written by the bilingual student.

Table 4 presents a breakdown of native language classes.

Table 4. Instruction in native language arts.

COURSE TITLE/ LEVEL	NUMBER OF CLASSES	AVERAGE CLASS REGISTER	DESCRIPTION
Italian I	mainstream classes.	4	New York State syllabus for level I foreign language
Italian II	mainstream classes	20	New York State level II syllabus
Italian III	mainstream classes	21	New York State level III syllabus
Italian IV	mainstream classes	20	New York State level IV syllabus
Native Language (advanced)	3	23	Survey of Italian literature and advanced grammar
Travel and tourism * (advanced)	1	27	ticketing, business letters, etc.

* can also be considered content-area course

BILINGUAL CONTENT-AREA COURSES

The bilingual content-area courses in mathematics, social studies, science, and secretarial studies follow the regular New York State syllabus. Adjustments are made to each course to fit the needs of the bilingual student. In math, social studies, and jewelry making, a team teaching approach is used because no fully bilingual teachers were found in those areas. In science, business, and secretarial studies, one fully bilingual teacher is certified for each class.

The focus in each of these content-area courses is to aim for complete transition into English. Transition should take place within a period of two to three years on the average. Table 5 presents a breakdown of courses in the content areas.

TRANSITION TO MAINSTREAM CLASSES

One of the major goals of IMPACT is to make program students functional in the English language and in the mainstream classes within an average span of two years. Each student is fully reevaluated on a continuous classification basis. Students in the program are encouraged to enter the mainstream as soon as possible. This transition may be gradual; beginning, for example, with mainstreaming in mathematics and then adding other subject areas when the student is ready. One hundred percent of the program students take two or more content-area courses in English. All students are required to take music, art, and gym in the mainstream. In the bilingual content-area courses, the general rule is to increase the use of English as the year progresses and at the same time make allowances for new entrants with little proficiency in English.

Table 5. Bilingual instruction in content areas.

COURSE TITLE	NUMBER OF CLASSES	AVERAGE REGISTER	PERCENT OF CLASS TIME IN WHICH ITALIAN IS USED
MATH - Algebra	2	17	60
- Geometry	1	15	40
- Business Math	1	18	70
SOCIAL STUDIES			
- World studies	1	19	-
- American History	1	24	-
SCIENCE - Biology	1	27	50
- Computer	1	17	40
SECRETARIAL STUDIES			
- Typing	1	21	50
- Steno	1	19	50
INDUSTRIAL ARTS			
- Jewelry Making	1	14	30
BUSINESS			
- Travel and Tourism	1	27	50

In a social studies course observed by the evaluator in May, 1981, 90 percent of the instruction was in English. A paraprofessional reviewed and translated into Italian concepts that presented difficulty to the recent arrivals. Students were not afraid to respond in English and used it about 70 percent of the time. In computer science, all of the materials and print-outs were in English and the teacher occasionally explained various concepts in Italian to the less English proficient. Students used English with each other about 60 percent of the time.

Sixty-five percent of the program students have completed their English as a second language requirement, but continue to receive some content-area instruction in their native language. Even when fully mainstreamed, program students remain in some way connected with the program, be it in extracurricular activities, guidance, or native language arts.

MAINSTREAM CLASSES

All IMPACT students are enrolled in mainstream classes in physical education, art, and music. Criteria for entry into other mainstream classes is based upon student's proficiency in English and in some cases subject matter.

Transition into the mainstream is gradual from two to three years on the average. Students are first given one subject in the mainstream, usually math. More classes are added as time goes on and proficiency in English is further developed. Students in the mainstream are always checked and assisted by the bilingual staff. Table 6 presents the mainstream classes in which program students are enrolled.

Table 6. Mainstream classes* in which program students are enrolled.

COMPONENT/SUBJECT	NUMBER OF STUDENTS	CRITERIA FOR SELECTION	OTHER COMMENTS
Physical education	160	Universal	Interpreters are used
Math	55	Proficiency in English & math	For students in transition
Social studies	95	Proficiency in English & s.s.	"
Sciences	73	Proficiency in English & science	"
Music	38	Required	"
Art	42	Required	"
Industrial arts	22	Required prof. in English	"
Secretarial studies	19	Proficiency in English	"

* All classes meet five hours per week

V. NON-INSTRUCTIONAL COMPONENT

CURRICULUM DEVELOPMENT

During the first year of funding under Title VII, IMPACT staff has developed curriculum materials in Italian-language classes as well as unit and lesson plans for all of the bilingual courses. All of the curriculum materials developed by the program follow the guidelines developed by the New York City Board of Education. The following are content areas for which curriculum materials were developed during 1980-81, already in classroom use: computer science, typing, stenography, jewelry making, and travel and tourism.

During the past several years, New Utrecht High School has had an Italian bilingual program equipped with a resource center full of materials developed during its operation. The resource center also has audio-visual and instructional materials such as tapes, charts for science, mathematics, social studies, and native language arts, reference books and magazines, tape recorders, film projectors, overhead projectors, and typewriters.

The school also has developed a large collection of Italian books, kept at the school library, including Italian versions of English best sellers. These books and materials are widely used by the foreign language students in mainstream, the Italo-American community, and the program students and staff.

PROGRAM PROJECTIONS FOR FUTURE GROWTH

The following table illustrates the program's projected increase in course offerings and enrollment from 1980-81 to 1981-82.

Table 7. Projected offerings and program enrollment.		
	1980 - 81	1981 - 82 Projected
Enrollment	160	220+
Course	No. of Sections	Projected No. of Sections
Social studies	2	4
Math	2	4
Science	1	1
Native language arts	3	5
E.S.L. basic	3	4
E.S.L. speech lab.	2	3
Steno	1	1
Typing	1	2
Drafting	0	1
Jewelry making	1	1
Computer	1	2
Travel & Tourism	1	1

In addition, IMPACT staff plans to develop bilingual curriculum in the following areas:

1. woodwork;
2. building trades;
3. architecture;
4. social studies units; and
5. hygiene.

SUPPORTIVE SERVICES

There is an extraordinary amount of support for program students at New Utrecht High School. In addition to the bilingual program staff, many of the teachers, guidance counselors, and administrators schoolwide speak Italian. Thus, counseling is made possible not just by specialists, but by the entire school staff.

Special emphasis is placed on career and vocational counseling. IMPACT is working on a career questionnaire in Italian for program students. At present, most of the counseling is done on an oral basis. An occupational outlook manual is used. The program is also planning to establish contact with major Italian and multi-national companies to provide program students with an opportunity for greater exposure in career choices.

Special note must be made of the persistent efforts of the family assistants. They have been instrumental in articulating efforts to relocate ten earthquake victim families of program students. They worked arduously with local welfare agencies in finding housing, employment, and medical care for these unfortunate families.

The family assistants make home visits two or three times a week depending on need. In addition, families often come to the school to seek advice on matters such as employment, insurance applications, medical care, and personal family difficulties. Daily contact is also made by telephone. There are at least 40 telephone calls made each day concerning students' attendance and individual problems. Parents are also called to be reminded of parent meetings such as P.T.A., Parent Advisory Council, and school functions. It was found from past experience that letters are not enough to encourage full parental participation.

STAFF DEVELOPMENT

All of the bilingual staff members participate in staff training activities which include:

1. workshops;
2. meetings; and
3. conferences.

All Title VII staff members attend bi-weekly department meetings or workshops conducted by the IMPACT coordinator, assistant principal for foreign languages, or teacher trainer depending on topic. In addition to formal meetings, on-going staff training takes place daily between teachers and trainers. Some topics covered were:

1. working with children;
2. working with parents;
3. cultural interaction;
4. diagnosis and prescription; and
5. personal and professional development.

Pre-service orientation meetings were also given in September by the program coordinator to acquaint staff with IMPACT.

The coordinator and all bilingual Title VII staff members attended the following conferences during the 1980-81 school year:

1. Italian Bilingual Educators Conference;
2. State Association of Bilingual Education Conference;
3. Career Education Conference sponsored by the Bureau of Bilingual Education, New York City Board of Education;
4. Columbia University Career Conference sponsored by the Bilingual Education Service Center (B.E.S.C.);
5. The City-wide conference for Italian parents; and

6. Bilingual Conference sponsored by New York City Board of Education, New York University, and the State Education Department.

Individual staff members also attended many other conferences particular to their fields, i.e. conference on computer sciences, etc.

PARENT PARTICIPATION

The Parent/Student/Community Advisory Committee meets monthly and is made up of ten members: six parents; three educators; and one student. Its function is to keep parents and community members informed of program development and to gather input for program formation as well as encourage members to get involved in the social affairs of the school.

As a result of program efforts: 50 percent of the P.T.A. is comprised of bilingual parents; all school notices are translated into Italian; 250 people attended the bilingual dinner dance; 750 community members attended the annual bilingual syposium co-sponsored by the P.T.A.; New Utrecht High School was well represented at the annual parent conference; and the sum of 4,000 dollars was collected for the Italian earthquake relief fund. The many 18 dollar contributions (symbolizing "life" in the Jewish tradition) reflected the support which non-program families gave to this project.

Even with the tremendous success of the parental component, IMPACT continues to plan for further parental participation. In addition to the development of a parent handbook in Italian, the following classes are being planned for the near future:

1. citizenship classes;

2. additional E.S.L. classes (Queensboro Community College presently runs an evening program); and

3. community orientation classes.

AFFECTIVE DOMAIN

Extracurricular Activities

Program students participate actively in the bilingual program and school-wide extracurricular activities. The Italian Club, the bilingual symposium, the IMPACT bilingual magazine, community drives, trips, parades, soccer, and tutoring elementary school bilingual pupils seem to be the most popular.

Special mention should be made concerning IMPACT activities during Italian culture week. Program students toured the local elementary schools and presented special stage performances in Italian, not only to Italian bilingual students but to all students, thus promoting intercultural understanding.

Student Performance

Three of the five graduating students went on to college, one went back to Italy, and one joined the work force. One hundred percent passed the Italian regents examination. In addition, approximately three students are represented in ARISTA, the honor society; one student won first prize at the American Association of Teachers of Italian poetry contest; and others were awarded certificates of merit for Italian plays presented at city hall.

Program students have been successful at obtaining summer jobs at bilingual banks, travel agencies, board of education offices, and summer immersion programs in Italian for English-speaking students.

VI. FINDINGS

ASSESSMENT PROCEDURES, INSTRUMENTS, AND FINDINGS

The following section presents the assessment instruments and procedures, and the results of the testing to evaluate student achievement in 1980-1981.

Students were assessed in English language development, growth in their mastery of their native language, and mathematics. The following are the areas assessed and the instruments used:

Reading in English--Stanford Achievement Test (Subtests: Total Reading, Listening Comprehension, Primary Levels II, III)

Reading in Italian--Teacher-made tests

Mathematics Performance--Teacher-made tests in basic competency and geometry

Attendance--School and program records.

The following analyses were performed:

On pre/post standardized tests of English reading and listening comprehension, and Italian reading achievement statistical and educational significance are reported.

Statistical significance was determined through the application of the correlated t-test model. This statistical analysis demonstrates whether the difference between pre-test and post-test mean scores is larger than would be expected by chance variation alone: i.e. is statistically significant.

This analysis does not represent an estimate of how students would have performed in the absence of the program. No such estimate could be made because of the inapplicability of test norms for this population, and the unavailability of an appropriate comparison group.

Educational significance was determined for each test and/or grade level by calculating an "effect size" based on observed summary statistics using the procedure recommended by Cohen.[1] An effect size for the correlated t-test model is an estimate of the difference between pre-test and post-test means expressed in standard deviation units freed of the influence of sample size. It became desirable to establish such an estimate because substantial differences that do exist frequently fail to reach statistical significance if the number of observations for each unit of statistical analysis is small. Similarly, statistically significant differences often are not educationally meaningful.

Thus, statistical and educational significance permit a more meaningful appraisal of project outcomes. As a rule of thumb, the following effect size indices are recommended by Cohen as guides to interpreting educational significance (ES):

a difference of 1/5 = .20 = small ES

a difference of 1/2 = .50 = medium ES

a difference of 4/5 = .80 = large ES

Information is provided on the attendance rate of students participating in the bilingual program compared with that of the total school population.

Although the project reports serving 160 students, scores for English reading achievement were reported for 73 students, while outcomes for listening comprehension in English were reported for 66. In reading in Italian, 61

---

[1]Jacob Cohen. Statistical Power Analysis for the Behavioral Sciences (Revised Edition). New York: Academic Press, 1977 Chapter 2.

students were reported. On teacher-made tests of mathematics in Italian, scores were reported for 12 students on the basic level and for 13 students in geometry. Attendance data were provided for 103 students. Achievement data in the areas of science, social studies, industrial arts, and secretarial studies were not provided.

The following pages present achievement in tabular form.

Table 8. English reading achievement.

Significance of mean total raw score differences between initial and final test scores in English reading achievement of Italian-speaking students with full instructional treatment on the Stanford Achievement Test (Total Reading, Primary Levels II and III).

Grade	Level	N	Pre-test Mean	Pre-test Standard Deviation	Post-test Mean	Post-test Standard Deviation	Mean Difference	Corr. Pre/post	t	p	ES
9	II	2	45.5	13.4	100.5	20.5	55.5	1.0	11.0	.05	7.78
	III	23	91.2	19.9	88.9	23.2	-2.3	.65	-.59	NS	-
10	II	5	39.5	11.8	79.0	20.7	39.2	-.15	3.43	.05	1.52
	III	14	100.2	16.0	106.2	20.9	6.6	.83	2.10	.05	.56
11	II	3	63.0	27.8	75.7	31.3	12.7	.93	1.95	NS	1.10
	III	18	96.0	20.8	98.2	14.6	2.2	.46	.49	NS	-
12	II	1	----------	----------	INSUFFICIENT DATA	----------	----------	----------	----------	----------	----------
	III	7	104.9	20.5	102.6	14.6	-2.3	.79	-.45	NS	-

.Ninth-grade students tested with Level II demonstrated a gain that was statistically and educationally significant but the number of students tested was very small. Ninth graders tested with Level III showed a decline in achievement that was not statistically significant.

.Students demonstrated statistically and educationally significant achievement gains. The negative pre-test/post-test correlation for students tested with Level II suggests the possibility of test unreliability or irregularities in the scoring or recording of students' scores.

.Eleventh graders tested with Level II showed an educationally significant gain, but the number of students tested was very small.

.Students tested with Level III generally did not demonstrate a significant gain. This may be due to the inadequacy of the test level which appears to be too easy for students to show significant growth.

.Twelfth graders did not show significant growth. Level III was apparently too easy for these students.

Table 9. English listening comprehension.

Significance of mean total raw score differences between initial and final test scores in native language reading achievement of students with full instructional treatment on the Stanford Achievement Test (Listening Comprehension Subtest, Primary Levels II and III).

Grade	Level	N	Pre-test Mean	Pre-test Standard Deviation	Post-test Mean	Post-test Standard Deviation	Mean Difference	Corr. Pre/post	t	p	ES
9	II	2	15.09	2.8	16.5	5.0	1.5	1.0	1.00	NS	-
	III	25	33.0	8.6	31.0	8.7	-2.0	.58	-1.26	NS	-
10	II	2	9.5	10.6	18.0	9.9	8.5	1.0	17.0	.05	12.0
	III	13	36.4	7.1	36.2	4.6	-.2	.55	-.09	NS	-
11	II	----------				NO DATA		----------			
	III	16	34.5	7.5	34.9	4.8	.4	.59	.29	NS	.07
12	II	1	----------			INSUFFICIENT DATA		----------			
	III	7	36.0	4.7	35.4	4.7	-.4	.57	-.39	NS	-

.Only tenth-grade students tested with Level II demonstrated significant gains, but the number of students tested was very small.

.Irregularities in the testing of students or in the scoring and reporting of outcomes is suspected for data reported in this table.

Table 10. Italian reading achievement.

Significance of mean total raw score differences between initial and final test scores in native language reading achievement of Italian-speaking students with full instructional treatment on the teacher-made tests.

Grade	N	Mean	Pre-test Standard Deviation	Mean	Post-test Standard Deviation	Mean Difference	Corr. Pre/post	t	p	ES
9	18	51.8	24.5	79.0	12.8	27.2	.23	4.64	.001	1.09
10	19	71.1	23.2	80.6	18.6	9.5	.82	3.10	.01	.71
11	20	64.1	21.8	73.8	15.7	9.7	.73	2.91	.01	.65
12	4	68.5	23.9	85.0	11.5	16.5	-.15	1.18	NS	--

- Students in grades 9, 10, and 11 demonstrated significant growth in Italian reading achievement.
- The pre/post correlation for ninth-grade results is low, suggesting low test reliability.
- Twelfth-grade students did not show significant growth in achievement.
- The negative pre/post correlation for twelfth-grade results suggests that the test was unreliable.

Table 11. Mathematics (basic competency) achievement.

Significance of mean total raw score differences between initial and final test scores in native language reading achievement of students with full instructional treatment on teacher-made tests of basic competency.

Grade	N	Pre-test Mean	Pre-test Standard Deviation	Post-test Mean	Post-test Standard Deviation	Mean Difference	Corr. Pre/post	t	p	ES
9	5	68.0	2.7	82.0	9.7	14.0	.66	3.81	.01	1.70
10	5	58.6	7.0	82.0	4.6	23.4	-.46	5.25	.001	2.35
11	1	----------INSUFFICIENT DATA----------								
12	1	----------INSUFFICIENT DATA----------								

- Ninth and tenth graders demonstrated significant growth in basic mathematical skills.
- The negative pre/post correlation for tenth graders suggests low test reliability.

Table 12. Mathematics (geometry) achievement.

Significance of mean total raw score differences between initial and final test scores in native language reading achievement of Italian-speaking students with full instructional treatment on teacher-made tests in geometry.

Grade	N	Pre-test Mean	Pre-test Standard Deviation	Post-test Mean	Post-test Standard Deviation	Mean Difference	Corr. Pre/post	t	p	ES
9	1	----------INSUFFICIENT DATA----------								
10	4	54.0	15.7	81.8	11.9	27.8	.99	12.76	.001	6.38
11	8	50.4	9.0	69.8	12.2	19.4	.54	5.21	.001	1.84
12	----------NO DATA----------									

.Tenth and eleventh graders demonstrated significant growth in geometry achievement at very high levels.

Table 13. Attendance

Significance of the difference between attendanc percentages of program students and the attendance percentage of the school.

Average School-Wide Attendance Percentage: 65.3

Grade	N	Mean Percentage	Standard Deviation	Percentage Difference	t	p
9	32	83.3	14.5	18.0	7.0	.001
10	25	81.2	25.5	15.9	3.1	.0025
11	33	84.0	17.1	18.7	6.3	.001
12	13	78.8	24.9	13.5	3.9	.001
TOTAL	103	82.5	19.6	17.2	8.9	.001

.The average attendance rate for program students was 82.5 percent. This rate exceeded the total high school rate (65.3 percent) by a margin that was highly significant.

.Attendance rates were approximately the same each grade.

.The attendance rates of students in each grade exceeded the total high school rate by a margin that was highly significant.

VII. CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

The New Utrecht Project IMPACT, in its first year of funding, provides a rich learning environment for program participants. The program offers a variety of courses not only in language skills acquisition, but also in the field of vocational training. These services are being expanded to accommodate Italian-speaking LEP students borough-wide.

During the three site visits made by the evaluator, key personnel were interviewed: the principal; many teachers; and guidance counselors (both in the bilingual and mainstream programs). The overwhelming impression is that the program has the support of the administration, teaching staff, and the entire community. The bilingual staff is highly qualified and dedicated. The project coordinator and the foreign language assistant principal have worked to articulate the coordination of recruitment of LEP students borough-wide and have searched for continued improvement of the program.

Some of the achievements of Project Impact during the 1980-81 academic year are the following:

1. development of curriculum materials in the field of vocational education;
2. expansion of bilingual materials and resources for the school library and program resource center;
3. articulation of a borough-wide recruitment program;
4. attendance at major bilingual education conferences by staff;

5. development of an outstanding parental and community participation program;

6. coordination of a fund raising drive for Italian earthquake victims (the sum of $4,000 was collected);

7. development of innovative bilingual vocational courses such as travel and tourism, and computer science;

8. coordination of an outstanding extracurricular and tutorial program; and

9. recruitment of qualified bilingual teachers in content areas, despite limited availability.

Areas which are in need of improvement are record keeping, testing, and reporting student performance. Achievement data were reported, in most areas, for less than half of the number of students served. Because of the small numbers of students reported and the problems of testing and measurement referred to in the tables of the findings section, no conclusions can be offered as to the effectiveness of instruction. In English reading, testing or scoring irregularities appear to have occurred in grades nine and ten, while the test level administered in grades eleven and twelve appears to have been too easy for students to demonstrate significant growth. Irregularities in the scores reported for listening comprehension in English made interpretation of the outcomes difficult. In reading in Italian, students in grades nine, ten, and eleven demonstrated significant growth, but the teacher-made tests appeared to function unreliably in grades nine and twelve. Small numbers of students were reported as taking teacher-made tests in mathematics on a pre- and post-test basis. The gains made by those students were judged to be statistically significant, although the correlations between pre- and post-test scores were very low in one instance and were moderate in two other cases (out of four groups reported).

The attendance rates of program students exceeded that of the whole school by a margin which was highly statistically significant.

The test scores outcomes suggest that student achievement was generally strong and positive, but problems of testing, or limited data, made interpretation of the reported findings difficult, or may have masked actual achievement.

RECOMMENDATIONS

It is suggested that college credit for certain courses be given to program students which would be a strong incentive for attending college after graduation. Although there is no advanced placement in Italian, there are colleges and universities in the metropolitan area which offer college credit courses, taught at the secondary school. It is highly recommended that the program staff investigate this opportunity.

As a result of interviews with program staff, the evaluation team felt that there were indications that student and program achievements were more than adequate. However, it would be beneficial to refine the record keeping process so that the details of program successes can be substantiated and are not forgotten with time. A log could be kept contrasting program students with students in the entire school, number of home visits made, name of parents contacted by phone, awards received by program students with details. This type of data would prove valuable for future evaluations, future funding, and public relations campaigns as well as an effective means of self-evaluation for future program development.

Due to the paucity of materials available city-wide in Italian, it is strongly urged that more communication be established with other

secondary schools in the city, such as Grover Cleveland High School in Brooklyn, with bilingual programs in Italian. Curricula and materials can be shared, thus reducing duplication of efforts.

Towards the improvement of the documentation and evaluation of the program, the following recommendations are offered:

a) In order to demonstrate the program's effectiveness, it is essential that the program strive to document and evaluate student performance. Towards that end, it is important that the program collect accurate information on as many of the participating students as possible. The small numbers reported in 1980-81 may not adequately or acurately reflect student achievement.

b) The outcomes reported for the Stanford Achievement Test and the Listening Comprehension Subtest suggest that the program examine and exercise more control over the conditions of testing, as well as the process of test scoring and reporting of test outcomes. Review of data sheets before submittal to the evaluators is recommended.

c) The teacher-made examinations used in the areas of Italian reading and mathematics should be reviewed, since they appeared to yield results of variable reliability. The use of standardized instruments in mathematics (translated into Italian when necessary) is an alternative which should be considered.

d) It is recommended that the program staff obtain achievement data of program students in the areas of science, social studies, industrial arts, and secretarial studies.

e) The program would profit from a review and revision of its evaluation design and processes in light of program objectives and the outcomes reported for the 1980-81 year. As the project is fundamentally a strong one, it should benefit from a more rigorous evaluation.